obtaining a sample of body fluid from said mammal, wherein said body fluid includes blood, blood products and saliva;

performing an enzyme-linked immunosorbent assay (ELISA) effective to bind myelin basic protein (MBP) and characterized by utilizing heparin sulphate bound to non-specific binding sites on MBP, thereby providing an assay whose specificity is due to binding of serum antibodies to specific binding sites on MBP;

determining a level of at least one autoantibody selected from the group consisting of anti-MBP IgG, anti-MBP IgM or a mixture thereof specific for said at least one protein in said sample; and,

comparing said level of said at least one autoantibody with statistically significant levels thereof, whereby a diagnosis or monitoring of MS in said mammal is made.

Claim 23(NEW). The method of claim 22, wherein said mammal is a human.

Claim 24 (NEW). The method of claim 22, wherein said diagnosis or monitoring is carried out on a single sample.